

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 74.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020232**Date Inspected:** 26-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Goodwin Steel, UK**Location:** Trentham, UK

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|------------------------------------|---------|---------------------|------------|----------------------------------|-----|----|-----|
| CWI Name: | N/A | CWI Present: | Yes | No | | | |
| Inspected CWI report: | Yes | No | N/A | Rod Oven in Use: | Yes | No | N/A |
| Electrode to specification: | Yes | No | N/A | Weld Procedures Followed: | Yes | No | N/A |
| Qualified Welders: | Yes | No | N/A | Verified Joint Fit-up: | Yes | No | N/A |
| Approved Drawings: | Yes | No | N/A | Approved WPS: | Yes | No | N/A |
| | | | | Delayed / Cancelled: | Yes | No | N/A |
| Bridge No: | 34-0006 | Component: | Cable Band | | | | |

Summary of Items Observed:

The following report is based on METS observations at Goodwin International, Trentham, UK on this date.

The QA Inspector observed Cable Band Casting 5540-B5-2-F(1) completing post weld heat treatment. The strip chart indicates that the temperature was increased at less than 100 degrees C per hour until the required temperature of 630 degrees was reached. The casting temperature is currently being maintained at 630 degrees.

The QA Inspector observed casting GG29428-1, 5540-B7-1-M being preheated in preparation for welding

The QA Inspector observed welding of Casting GG29428-1, Drawing Number 5540-B7-1-M. The welding was being performed by Mr. B. Kelsall. Mr. Kelsall was using WPS04-102F4B Issue 5. The welding was being performed at 219 amps. The filler metal was 5mm AWS A5.1 E 7018-1. Welding was being performed in the 1G position.

The QA inspector periodically observed that Goodwin International personnel perform finish grinding of an assembled B9 Type 1 cable band for east panel point 28 (EPP-28) consisting of castings 5540-B9-1-M-8, and 5540-B9-1-F-8. The rope grooves are being dressed, an assembled B9 Type 1 cable band consisting of castings 5540-B9-1-M-5, and 5540-B9-1-F-6, the rope grooves were observed being dressed and an assembled B9 Type 1 cable band for west panel point 28 (WPP-28) consisting of castings 5540-B9-1-M-7, and 5540-B9-1-F-5, the hand rope stanchion pads were being dressed. In addition, all sharp edges from the machining operations and suspender groove transitions are being ground to required finish by Goodwin International personnel.

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The QA inspector reviewed a copy of the Goodwin Steel Castings “Weld Excavation Map” for casting GG29427-1(R6), B6-1-F. The Weld Excavation Map was reviewed for accuracy and compliance with contract documents. This seventh repair cycle is a major repair and requires post weld heat treatment. Caltrans Lot Number B243-027-11 was assigned for tracking purposes.

The QA inspector reviewed a copy of the Goodwin Steel Castings “Weld Excavation Map” for casting GG29434-2(R4), B8-2-M. The Weld Excavation Map was reviewed for accuracy and compliance with contract documents. This fifth repair cycle is a minor repair and does not require post weld heat treatment. Caltrans Lot Number B243-023-11 was assigned for tracking purposes.

The QA inspector reviewed a copy of the Goodwin Steel Castings “Weld Excavation Map” for casting GG29433-1(R2), B8-1-F. The Weld Excavation Map was reviewed for accuracy and compliance with contract documents. This third repair cycle is a minor repair and does not require post weld heat treatment. Caltrans Lot Number B243-024-11 was assigned for tracking purposes.

The QA inspector reviewed a copy of the Goodwin Steel Castings “Weld Excavation Map” for casting GG29428-2(R2), B7-1-M. The Weld Excavation Map was reviewed for accuracy and compliance with contract documents. This third repair cycle is a major repair and requires post weld heat treatment. Caltrans Lot Number B243-025-11 was assigned for tracking purposes.

The QA inspector reviewed a copy of the Goodwin Steel Castings “Weld Excavation Map” for casting GG29426-1(R3), B6-1-M. The Weld Excavation Map was reviewed for accuracy and compliance with contract documents. This fourth repair cycle is a major repair and requires post weld heat treatment. Caltrans Lot Number B243-026-11 was assigned for tracking purposes.

The QA inspector reviewed a copy of the Goodwin Steel Castings “Weld Excavation Map” for casting GG29418-1(R4), B2-1-M. The Weld Excavation Map was reviewed for accuracy and compliance with contract documents. This fifth repair cycle is a minor repair and does not require post weld heat treatment. Caltrans Lot Number B243-028-11 was assigned for tracking purposes.



Summary of Conversations:

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Relevant conversations are documented above

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

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| Inspected By: | Riegler,Randy | Quality Assurance Inspector |
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| Reviewed By: | Edmondson,Fred | QA Reviewer |
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